

### Listă publicații:

1. Chiorean C.G., Buru S.M. *Ultimate and nominal strength analysis of composite sections with arbitrary shape*. Ninth international conference on advances in steel structures, ICASS 2018, 5-7 December 2018, Hong Kong, China.
2. Buru S.M., Chiorean C.G. *Practical nonlinear inelastic analysis method of 3D composite steel-concrete composite frameworks*. Ninth international conference on advances in steel structures, ICASS 2018, 5-7 December 2018, Hong Kong, China.
3. Buru S.M., Chiorean C.G. *Advanced finite element modelling of composite steel-concrete beams*. Proceedings of the C65 International Conference, 15-17 November 2018, Cluj-Napoca, Romania.
4. Moldovan I.F., Buru S.M., Nedelcu M. *A numerical study of the shear behaviour of CFRP retrofitted precast hollow-core slabs*. Proceedings of the C65 International Conference, 15-17 November 2018, Cluj-Napoca, Romania.
5. Chiorean C.G., Buru S.M. *Second-order flexibility-based model for nonlinear inelastic analysis of composite steel-concrete frameworks with partial composite action and semi-rigid connections*. Proceedings of the 12th international conference on advances in steel-concrete composite structures. ASCCS 2018, 27-29 June 2018, Valencia, Spain.
6. Botez M.D., Bredean L., Buru S.M. *Reinforced concrete slab subjected to blast. Numerical model Validation*. The 17<sup>th</sup> edition of Modern Technologies for the 3<sup>RD</sup> Millenium, 22-23 March 2018, Oradea, Romania.
7. Chiorean C.G., Buru S.M. *Practical nonlinear inelastic analysis method of composite steel-concrete beams with partial composite action*. Engineering Structures, 134, 74-106, 2017. <http://dx.doi.org/10.1016/j.engstruct.2016.12.017>.
8. Chiorean C.G., Buru S.M. *A computer method for nonlinear inelastic analysis of composite steel-concrete frameworks with partial shear connection*. The Sixth International Conference On Structural Engineering, Mechanics And Computation, 5-7 September 2016, Cape Town, South Africa.
9. Chiorean C.G., Buru S.M. *Nonlinear inelastic analysis of 3D composite steel-concrete frameworks with partial shear connection*. Proceedings of the International Colloquim on Stability and Ductility of Steel Structures, Wiley Ernst & Sons, 2016.
10. Buru S.M., Chiorean C.G. *Analiza neliniară avansată a structurilor în cadre compozite oțel-beton cu interacțiune parțială și conexiuni semirigide*. CONSTRUIEȘTE CU „STEEL” Lucrările celei de-a XIV-a Conferințe Națională de Construcții Metalice Cluj Napoca, 19-20 noiembrie 2015.
11. Chiorean C.G., Buru S.M. *Advanced Nonlinear Inelastic Analysis of 3D Composite Steel-Concrete Frameworks with Partial Shear Connection*. Trimis spre publicare (în curs de recenzie), Computers and Structures, 2015
12. Chiorean C.G., Marchis I.V., Buru M. *A Computer Method Design and M-N-O Analysis of Prestressed RC Cross-Sections*. Journal of Structural Engineering (CSIR-SERC), Vol. 42, No.1, pp. 64-77, 2015
13. Chiorean C.G., Buru S.M. *Advanced Nonlinear Inelastic Analysis of Three Dimensional Composite Steel-Concrete Frameworks*. The 18th International Conference on Composite Structures, 15-18 June 2015, Lisabona, Portugal
14. Ștefan M. Buru, Cristian V. Miculaș, Mihai D. Șelariu, Tudor Milchiș, Cosmin G. Chiorean. *Advanced Nonlinear Inelastic Analysis of Composite Beams with Partial Shear Connection*. Proceedings of the Second International Conference for PhD Students in Civil Engineering and Architecture, U.T.PRES, Cluj-Napoca, 2014
15. Cosmin G. Chiorean, Ioana Marchiș, Marius Buru, *A computer method for M-N- $\Phi$  analysis of prestressed reinforced concrete cross-sections*. ICCMS 2014: 5<sup>th</sup> International Congress on Computational Mechanics and Simulation, 10-13 December, India
16. C.G. Chiorean, M. Buru, A. Chira, *Advanced nonlinear inelastic analysis of 3D composite steel-concrete frameworks*. CST 2014: The Twelfth International Conference on Computational Structures Technology, 2-5 September 2014, Naples, Italy
17. C.G. Chiorean, A. Chira, M. Buru *A computer method for design and M-N-Phi analysis of composite steel-concrete cross section*. SEMC 2013: The Fifth International Conference on

Structural Engineering, Mechanics and Computation, 2-4 September 2013, Cape Town, South Africa

18. C.G. Chiorean, M. Buru, A. Chira, I. Marchis. *Nonlinear inelastic analysis of 3D composite steel-concrete frameworks*. SEMC 2013: The Fifth International Conference on Structural Engineering, Mechanics and Computation, 2-4 September 2013, Cape Town, South Africa
19. Ștefan M. Buru, Alexandru Chira. *Advanced finite element modeling of steel frame*. C60 International Conference: Tradition and Innovation-60 Years of Civil Engineering Higher Education in Transilvania”, 7-9 Nov. 2013, Cluj-Napoca, România, ISBN 978-973-662-903-7
20. C.G. Chiorean, M. Buru, A. Chira. *Advanced nonlinear inelastic analysis of 3D composite steel-concrete frameworks*. C60 International Conference: Tradition and Innovation – 60 Years of Civil Engineering Higher Education in Transilvania”, 7-9 Nov 2013, Cluj-Napoca, România, ISBN 978-973-662-903-7
21. Ștefan M. Buru, Alexandru Chira. *New trends in finite element modeling of steel frame structures*. CE-PhD 2012: First International Conference for PhD Students in Civil Engineering”, 4-7 November 2012, Cluj-Napoca, România, ISBN 978-973-757-710-8
22. C.G. Chiorean, G. Tarta, I. Marchiș, M. Buru. *Computer - Based Nonlinear Analysis Method for Seismic Performance Assessment of 3D Steel Frameworks*. CST 2012: The Eleventh International Conference on Computational Structures Technology, 4-7 September 2012, Croatia

#### **Teza de doctorat**

„Analiza avansată a structurilor alcătuite din elemente compozite oțel-beton”

Conducător științific: Prof. dr. ing. Cosmin G. Chiorean

Domeniul: Inginerie Civilă

#### **Listă cărți, îndrumătoare didactice:**

1. A. Popa, T.S. Besoiu, M.D. Botez, L.A. Bredean, S.M. Buru, A.G. Marchiș – *Îndrumător de lucrări la Rezistența Materialelor*, UTPRESS, 2017, ISBN 978-606-737-276-2.
2. Alexandru Chira, Ștefan Marius Buru - *Analiză neliniară a structurilor. Îndrumător de laborator*, U.T.PRES 2014, Cluj-Napoca, 2014, ISBN 978 – 973 – 662 – 941 – 9.

#### **Participări în contracte de cercetare:**

1. Proiect Nr. 2009/2017, CICDI-2017, Competiție internă UTCN, “Analiza avansată a structurilor în cadre compozite oțel-beton cu interacțiune parțială și noduri semirigide”, 2017-2018, Director proiect;
2. Proiect Nr. 2007/2017, CICDI-2017, Competiție internă UTCN, “Scenarii avansate de analiză la colaps progresiv a structurilor din beton armat”, 2017-2018, Membru proiect;